## CLAIMS

1. A system for monitoring and tracking a container in an environment, comprising:

a transmitter assigned a unique identification number and being coupled to the container, the transmitter being adapted to transmit the unique identification number;

at least one receiver adapted to receive the unique identification number from the transmitter, to responsively determine a direction of travel of the transmitter, and to responsively generate a direction of travel code; and,

at least one node computer coupled to the at least one receiver and being adapted to control the receiver, to receive the unique identification number and the direction of travel code from the at least one receiver, and to responsively determine a location of the container as a function of the direction of travel code.

2. A system, as set forth in claim 1, further comprising:

a vehicle, wherein the container is adapted to be moved by the vehicle.

3. A system, as set forth in claim 2, further comprising:

a trailer adapted to be coupled to the vehicle and to receive the container.

4. A system, as set forth in claim 2, further comprising a second transmitter assigned a second unique identification number and being coupled to the vehicle, the second transmitter being adapted to transmit the second unique identification number.

5. A system, as set forth in claim 4, wherein the receiver is adapted to receive the second unique identification number from the second transmitter, to responsively determine a direction of travel of the second transmitter and to responsively generate a second direction of travel code.

6. A system, as set forth in claim 5, wherein the at least one node computer is adapted to receive the second unique identification code and the second direction of travel code from the at least one receiver and to responsively determine a location of the vehicle as a function of the second direction of travel code.

7. A system, as set forth in claim 6, further comprising a controller computer coupled to the node computer and being adapted to receive the first and second unique identification numbers, the location of the container, and the location of the vehicle and to compare the locations of the container and the vehicle to at least one predefined constraint of movement of the container and activating at least one warning device if the at least one predefined constraint of movement is violated.

8. A system, as set forth in claim 1, wherein the environment includes at least two airports, each airport being divided into a plurality of zones.

9. A system, as set forth in claim 8, further including at least one portal located between each airport and at least one receiver being located at each portal.

10. A system, as set forth in claim 8, including at least one portal located between first and second zones and at least one receiver being located at each portal.

11. A system, as set forth in claim 1, wherein the environment includes a loading zone for at least one aircraft, the loading zone including a portal, the receiver being located at the portal.

12. A system, as set forth in claim 1, wherein the environment includes at least one container area, the container area including a portal, the receiver being located at the portal.

13. A system, as set forth in claim 12, wherein the at least one container area is one of a pit area, a cargo area, a domestic mail area, a maintenance area, and an international mail area.

14. A system, as set forth in claim 1, wherein the environment includes at least one ingress/egress area, the ingress/egress area including a portal, the receiver being located at the portal.

15. A system, as set forth in claim 1, further comprising:

a controller computer coupled to the node computer and being adapted to receive the unique identification number and the location of the container from the node computer and to store the unique identification number and the location of the container; and

a central computer facility coupled to the controller computer and being adapted to collect and store the unique identification number and the location of the container for exportation from the system.

16. A system, as set forth in claim 1, wherein the transmitter generates at least one low frequency electromagnetic field.

17. A system, as set forth in claim 16, wherein the low frequency electromagnetic field operates at 125 kHz or less.

18. A system, as set forth in claim 15, wherein the receiver includes a first antenna and second antenna, wherein the first antenna and the second antenna are placed at a portal in the environment and correspond to the direction of travel.

19. A system, as set forth in claim 18, wherein the controller computer compares the location of the container to at least one predefined constraint to movement of the container stored in the controller computer to determine at least one violation in movement of the container and activating at least one warning device connected to the node computer, controller computer or central computer facility if the at least one predefined constraint of movement is violated.

20. A system, as set forth in claim 19, wherein the warning device is selected from the group consisting of the following:

(a) a user terminal or work station;

(b) an electronic sign;

(c) a voice synthesizer;

(d) a speaker;

(e) a monitor;

(f) a video or digital camera; or

(g) a pager system.

21. A system, as set forth in claim 19, wherein the central computer facility links with at least one third party communication system to respond to the violation of movement of the container.

22. A system, as set forth in claim 21, wherein the third party communication system is selected from the group consisting of the following:

(a) a computer network;

(b) a telecommunication network; or

(c) a pager network.

23. A system, as set forth in claim 15, wherein a record maintained by the controller computer stores the unique identification number and location of the container and the record being transferable to the central computer facility.

24. A system, as set forth in claim 1, wherein the environment is a transportation environment.

25. A system, as set forth in claim 1, wherein the environment is an airport environment.

26. A system, as set forth in claim 1, wherein the environment is a truckyard.

27. A system, as set forth in claim 1, wherein the environment is a railyard.

28. A system, as set forth in claim 1, wherein the receiver uses ultra wide band technology and is further adapted to determine a distance between the receiver and the transmitter.

29. A system, as set forth in claim 28, wherein the node computer is adapted to track and store location information based on signals received from the receivers.

30. A method for monitoring and tracking at least one container in an environment, comprising:

dividing the environment into a plurality of domains with at least one portal separating the domains;

providing the container with a unique identification number;

developing an electronic record for the identification number and recording a first location for the container in a first computer;

attaching a transmitter emitting the unique identification number to the container;

providing a receiver at the portal;

moving the container through the portal; and,

receiving the unique identification number by the receiver when the transmitter passes through the portal and responsively determining a direction of travel of the container and generating a direction of travel code.

31. A method, as set forth in claim 30, including the steps of:

sending the identification number and the direction of travel code from the receiver to a second computer to verify the identification number and the direction of travel code;

determining a second location of the container from the direction of travel code by the first computer; and

sending the unique identification number and the location of the container from the second computer to the first computer to store the second location of the container in the electronic record of the container.

32. A method, as set forth in claim 30, including the steps of

dividing the domains into a plurality of zones with at least one portal separating the zones.

33. A method, as set forth in claim 31, further comprising:

defining at least one constraint to movement of the container in the record of the container;

comparing the second location of the container to the constraint to movement of the container by the first computer to determine at least one violation in movement of the container; and

activating a warning device connected to the first computer or the second computer to respond to the violation in movement of the container.

34. A method, as set forth in claim 30, wherein the transmitter generates at least one low frequency electromagnetic field.

35. A method, as set forth in claim 34, wherein the low frequency electromagnetic field operates at 125 kHz or less.

36. A method, as set forth in claim 30, wherein the receiver provides a first antenna and second antenna placed about the portal to receive the unique identification number, wherein the first antenna and the second antenna correspond to a separate direction of travel code.

37. A method, as set forth in claim 33, wherein the warning device is selected from the group consisting of the following:

(h) a user terminal or work station;

(a) an electronic sign;

(b) a voice synthesizer;

(c) a speaker;

(d) a monitor;

(e) a video or digital camera; or

(f) a pager system.

38. A method, as set forth in claim 31, further comprising:

transferring the record with the unique identification number and the second location to a third computer; and

exporting the record with the unique identification number and the second location to an independent third party system.

39. A method, as set forth in claim 31, further comprising:

transferring the record with the unique identification number and the second location to a third computer; and

communicating with at least one third party communication system to respond to the violation in movement of the container.

40. A method, as set forth in claim 39, wherein the third party communication system is selected from the group consisting of the following:

(d) a computer network;

(e) a telecommunication network; or

(f) a pager network.

41. A method, as set forth in claim 30, wherein the environment is a transportation environment.

42. A method, as set forth in claim 30, wherein the environment is an airport environment.

43. A method, as set forth in claim 30, wherein the environment is a truckyard.

44. A method, as set forth in claim 30, wherein the environment is a railyard.

45. A method, as set forth in claim 30, wherein the receiver uses ultra wide band technology the method includes the step of determining a distance between the receiver and the transmitter.

46. A method, as set forth in claim 45, further including the step of tracking and storing location information based on signals received from the receivers.

47. A system for monitoring and tracking a container in an environment, comprising:

a transmitter attached to the container and being assigned a unique identification number, the transmitter being adapted to transmit the unique identification number;

a receiver located within the environment, the receiver being adapted to receive the unique identification number and responsively determine a direction of travel code;

a node computer coupled to the receiver, the node computer being adapted to receive the unique identification code and direction of travel code from the receiver and responsively determine a location of the container:

a controller computer coupled to the node computer, the controller computer being adapted to receive the unique identification number and the location of the container from the node computer and to store the unique identification number and the location of the container; and

a central computer facility coupled to the controller computer, the central computer facility being adapted to collect and store the unique identification number and the location of the container for exportation from the system.

48. A system, as set in claim 47, wherein the receiver includes first and second antennas, the receiver being adapted to generate first and second receiving fields using the first and second antennas, respectively.

49. A system, as set forth in claim 48, wherein the receiver is adapted to detect the container in the first and second receiving fields.

50. A system, as set in claim 49, wherein the direction of travel code is a function of the container being detected in the first and second receiving fields.

51. A system, as set forth in claim 47, wherein the environment is a transportation environment.

52. A system, as set forth in claim 47, wherein the environment is an airport environment.

53. A system, as set forth in claim 47, wherein the environment is a truckyard.

54. A system, as set forth in claim 47, wherein the environment is a railyard.

55. A system, as set forth in claim 47, wherein the receiver uses ultra wide band technology and is further adapted to determine a distance between the receiver and the transmitter.

56. A system, as set forth in claim 47, wherein the node computer is adapted to track and store location information based on signals received from the receivers.